

IN THE CLAIMS:

Please cancel Claims 2-17 and 19-29 in their entirety without prejudice.

Please add the following new claims 32-69.

32. (New) A particulate tape, comprising:

a single component, wherein said component is formed by electrophoretically depositing a particulate material on a carrier.

33. (New) The particulate tape of Claim 32, wherein said particulate tape is removable from said carrier.

34. (New) The particulate tape of Claim 32, wherein said particulate tape is substantially continuous in the form of a ribbon or sheet.

A2 35. (New) The particulate tape of Claim 32, wherein said single component is generally dielectric.

36. (New) The particulate tape of Claim 35, wherein said single component includes at least one material selected from the group consisting of magnesia, alumina, silica, titania, zirconia, barium oxide, lead oxide, bismuth oxide, and a combination of the above materials.

37. (New) The particulate tape of Claim 32, wherein said single component is formed in a pattern corresponding to a patterned deposition electrode located on the surface of said carrier.

38. (New) The particulate tape of Claim 37, wherein said single component is generally conductive.

39. (New) The particulate tape of Claim 38, wherein said component includes at least one material selected from the group consisting of aluminum, silver, copper, nickel, palladium, gold, and a combination of the above materials.

40. (New) A particulate tape, comprising:

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Cont at least two components, wherein at least one of said two components is formed by electrophoretically depositing a particulate material on a carrier.

41. (New) The particulate tape of Claim 40, wherein said particulate tape is removable from said carrier.

42. (New) The particulate tape of Claim 40, wherein said particulate tape is substantially continuous in the form of a ribbon or sheet.

43. (New) The particulate tape of Claim 40, wherein said electrophoretically formed component is formed in a pattern corresponding to an electrode located on the surface of said carrier.

44. (New) The particulate tape of Claim 43, wherein said electrophoretically formed component is generally conductive.

45. (New) The particulate tape of Claim 44, wherein said electrophoretically formed component comprises wiring interconnects of an electronic device.

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46. (New) The particulate tape of Claim 40, wherein said electrophoretically formed component is formed at least partially on top of a second component.

47. (New) The particulate tape of Claim 40, wherein said electrophoretically formed component extends through the thickness of at least one other component of said tape to form a via.

48. (New) The particulate tape of Claim 40, wherein a first component is formed by electrophoretically depositing a first particulate material on one area of said carrier and a second component is formed by electrophoretically depositing a second particulate material adjacent to said first component.

49. (New) The particulate tape of Claim 48, wherein said first component forms a via through a layer of said second component.

50. (New) The particulate tape of Claim 40, wherein said electrophoretically formed component is capable of being transferred by lamination to a second carrier.

51. (New) The particulate tape of Claim 40, wherein said electrophoretically formed component is formed on a carrier and is transferred by lamination to a particulate tape comprising at least one other component.

52. (New) An electronic device formed by a method comprising the steps of:

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forming at least one component by electrophoretically depositing a particulate material on a carrier;

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laminating said component to a stack of at least one particulate tape;

removing said carrier from said component; and
sintering the laminate.

53. (New) The device of Claim 52, wherein said removing step occurs before said laminating step.

54. (New) The device of Claim 52, wherein said removing step occurs after said laminating step.

55. (New) The device of claim 52, wherein said device includes a capacitor.

56. (New) The device of claim 52, wherein said device includes an inductor.

57. (New) The device of claim 52, wherein said device includes a resistor.

58. (New) The device of claim 52, wherein said device includes a conductive interconnect structure.

59. (New) A method for producing a particulate tape, comprising the steps of:

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providing a tape carrier which includes an electrically conductive area on at least one surface of said carrier;

electrophoretically depositing a particulate material onto said conductive area to form a component of said particulate tape; and

removing said component from said carrier.

60. (New) The method of Claim 59, wherein said electrically conductive area forms a pattern on the surface of the tape carrier.

61. (New) The method of Claim 60, further comprising the steps of:

providing a second patterned electrically conductive area on the tape carrier which is electrically isolated from said first patterned electrically conductive area; and

electrophoretically depositing a second component onto at least one of said first or second patterned electrically conductive areas.

62. (New) The method of Claim 59, further comprising the step of:
laminating said electrophoretically formed component to another surface prior to removal from said carrier.

63. (New) An apparatus for forming a particulate tape, comprising:
a tape carrier having an electrically conductive area on at least one surface, and
an electrophoretic deposition bath, wherein a component of a particulate tape may be formed by electrophoretically depositing a particulate material on said conductive surface in said bath.

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64. (New) The apparatus of Claim 63, wherein said carrier is a ribbon.

65. (New) The apparatus of Claim 63, wherein said carrier is a belt.

66. (New) The apparatus of Claim 63, wherein said carrier is a drum.

67. (New) The apparatus of Claim 63, wherein said carrier is a sheet.

68. (New) The apparatus of Claim 63, wherein said carrier is a plate.

69. (New) A method for producing a particulate tape, comprising the steps of:

moving a surface of a movable carrier into a first electrophoretic deposition bath, wherein the surface of said carrier includes a first patterned electrode and said deposition bath includes a suspension of a first particulate material;

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Cont electrophoretically depositing a layer of said first material on the surface of said carrier in a pattern determined by the pattern of said electrode;

moving said carrier with said deposited layer out of said electrophoretic deposition bath;

at least partially drying said deposited layer; and

removing said deposited layer from said carrier.

REMARKS

This response addresses those issues raised in the Office Action mailed October 4, 2001. Claims 1, 18, 30-69 are presently pending in this application. Initially, Applicant's attorney wishes to thank the Examiner for the careful consideration given this case. It is believed that the present remarks and defining amendments render the claims allowable in their current form.

Reconsideration and allowance of the claims as written is respectfully requested in view of the following remarks.